FEATURES

- **Multi-protocol handheld reader**
- **Read from and write to TransCore eGo® tags, and read from Association of American Railroads, and American Trucking Associations/International Organization for Standardization tags.**
- **Multitag sorting, or filtering, allows the user to specify groups within a population of eGo tags to be selected and read from and/or written to.**
- **Ideal for exception-based scanning, which is used when an installed reader system does not detect a tag.**
- **Reduces errors and redundant manual data entry**
- **Ideal for electronic vehicle registration and compliance, rail, fleet, electronic toll collection, Homeland Security, airports, and parking applications**
- **Integrated circular polarized antenna reads tags in any orientation.**
- **Rugged design with-stands the harshest environments.**
- **Light-emitting diodes indicate handheld reader functions.**
- **Rechargeable lithium-ion battery pack powers a full shift's work.**

Encompass™ 1 Handheld Reader

TransCore's Encompass 1 Handheld Reader combines the TransCore RFID Scan Handle and the Intermec 700 Color Mobile Computer (models 741, 751, and 761 only). The handheld reader is ideal for radio frequency identification (RFID) solutions requiring an extended read range, multitag sort, read/write capability, and memory capacity not provided by proximity technology.

TransCore offers the handheld reader as part of its product line designed for transportation-based applications. The handheld reader is suitable for electronic vehicle registration and compliance, rail, fleet, electronic toll collection, Homeland Security, airports, and parking applications.

The handheld reader offers users the flexibility of writing to eGo® tags and verifying tag read exceptions at fixed-reader RFID sites, such as airport parking facilities. The handheld reader can read from and write to TransCore eGo-type RFID tags[1] up to 3 feet (0.9 meters) away, and read from Association of American Railroads (AAR), American Trucking Associations (ATA), International Organization for Standardization (ISO), whether programmed as full frame or half frame, up to 4 feet (1.2 meters) away. The handheld reader can identify up to 6 eGo tags per second and can retain up to 100 tag IDs in volatile memory. The handheld reader allows users to read and store tag information eliminating time-consuming tag data entry tasks.

The Encompass 1 Handheld Reader is designed for easy, comfortable scanning, yet it is rugged enough to withstand the harshest working environments. And the rechargeable lithium-ion battery pack powers the RFID reader for an entire shift.

1.TransCore eGo tags are fully compliant with American National Standards Institute (ANSI) INCITS 256:2001 and ISO 18000-6 standards.

Encompass™ 1 Handheld Reader

Frequency

902- to 928-MHz spread-spectrum frequency-hopping for unlicensed operation in the United States

Read/Write Performance

Read/Write Ranges

Read ATA tags at a distance of 4 feet (1.2 m).

Read at least 6 eGo tags per second at a distance of 3 feet (0.9 m). Read 8 bytes of data from eGo tag in less than 50 milli-seconds (ms).

Write a single byte of data to an eGo tag at an average of 75 ms at a distance of 2.1 feet (0.6 m).

Software/Firmware Features

Protocols

Handheld reader software fully supports the ANSI INCITS 256-2001 for Application Peripheral Interface (API), parts 2, 3.1, and 4.2.

Communications Interface

Infrared data connection between the RFID Scan Handle and 700 series Color Mobile Computer

Data Rate

eGo tags: 33 to 40 kbps

ATA tags: 10 kbps

Multitag Access (Filtering)

User-specified groups within a population of eGo tags can be selected and read from and/or written to using multitag access commands.

Hardware Features

Power Requirements

Removable lithium-ion battery pack

***Note**: Intermec 700 Color Mobile Computer requires a separate battery pack and charger.*

LEDs

LEDs located on the scan handle indicate the status of the following reader features: reader power, host communications, RF power, tag communications, and battery power.

Physical Characteristics

Weight

Scan handle with battery: 1.06 lbs (0.48 kg)

Scan handle with 700 color mobile computer and battery: 2.29 lbs (1.04 kg)

Environment

Operating Temperature

-4ºF to 131ºF (-20ºC to 55ºC)

Storage Temperature

-40ºF to 158ºF (-40ºC to 70ºC)

Humidity

0 to 95%, relative, non-condensing

Shock

20 G, 1/2 sine pulse, 11 ms duration, during operation

Vibration

1.0 G_{rms}, 10 to 500 Hz, 3 axes during operation

Environmental

Scan handle is sealed against windblown rain and dust International Electrotechnical Commission ((IEC) 529 rated at IP54).

Standards

Communications

The TransCore RFID Scan Handle conforms to the following standards:

Automotive Industry Action Group B-11

ANSI INCITS 256:2001 - Parts 2, 3.1, and 4.2

ANSI MH10.8.4

ISO/IEC WD18000 Part 6

Approvals

cULus listed accessory

Compliance

RF Interference

Federal Communications Commission (FCC) Part 15/Industry Canada ICES-003/ CISPR Class B digital emissions

Scan Handle Battery Pack

1200 milliamp-hour, 90-135V AC, 50Hz/ 60Hz, lithium ion with integral charger and 4-hour charge time

Accessories

Dual pack charger

Models Available

Dual-protocol: ATA and eGo

eGo protocol only

Contact TransCore for ordering information

Documentation

Encompass™ 1 Handheld Reader Quick Start Guide

Encompass™ 1 Handheld Reader Application Programming Interface

TRANSCORE

For product information call: 1.800.923.4824 or 972.733.6600 (outside the U.S.) Fax 972.733.6486

www.**transcore**.com

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